

1635

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/554,267

DATE: 03/19/2001
TIME: 15:10:48

Input Set : A:\24811669.app
Output Set: N:\CRF3\03192001\I554267.raw

ENTERED

```

3 <110> APPLICANT: PEYMAN, ANUSCHIRWAN
4   UHLMANN, EUGEN
5   WEISER, CAROLINE
7 <120> TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES AGAINST TENASCIN FOR
8   TREATING VITILIGO
10 <130> FILE REFERENCE: 02481.1669
12 <140> CURRENT APPLICATION NUMBER: 09/554,267
13 <141> CURRENT FILING DATE: 2000-07-24
15 <150> PRIOR APPLICATION NUMBER: PCT/EP98/06868
16 <151> PRIOR FILING DATE: 1998-10-29
18 <160> NUMBER OF SEQ ID NOS: 58
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 7346
24 <212> TYPE: DNA
25 <213> ORGANISM: Homo sapiens
27 <400> SEQUENCE: 1
28 gaattcgcta gagccctaga gccccagcag caccagcca aaccacctc caccatgggg 60
29 gccatgactc agctgttggc aggtgtcttt cttgctttcc ttgccctgc taccgaaggt 120
30 ggggtcctca agaaagtcac ccggcacaa cgacagagtg ggggtgaacgc caccctgcca 180
31 gaagagaacc agccagtggg gtttaaccac gtttacaaca tcaagctgcc agtgggatcc 240
32 cagtgttcgg tggatctgga gtcagccagt ggggagaaa acctggcacc gccttcagag 300
33 ccagcgaaa ctttcagga gcacacagta gatgggaaa accagattgt cttcacacat 360
34 cgcataca tccccgcgc ggcctgtggc tgtgccgcag cccctgatgt taaggagctg 420
35 ctgagcagac tggaggagct ggagaacctg gtgtcttccc tgaggagca atgtactgca 480
36 ggagcaggct gctgtctcca gcctgccaca ggccgcttg acaccaggcc cttctgtagc 540
37 ggtcggggca acttcagcac tgaaggatgt ggctgtgtct gcgaacctgg ctggaaaggc 600
38 cccaactgct ctgagcccg atgtccaggc aactgtcacc ttcgaggccg gtgcattgat 660
39 gggcagtgca tctgtgacga cggcttcacg ggcgaggact gcagccagct ggcctgcccc 720
40 agcgactgca atgaccagg caagtgcgtg aatggagtct gcactctgtt cgaaggctac 780
41 gcggctgact gcagccgtga aatctgccca gtgccctgca gtgaggagca cggcacatgt 840
42 gtagatggct tgtgtgtgtg ccacgatggc tttgcaggcg atgactgcaa caagcctctg 900
43 tgtctcaaca attgctacaa ccgtggacga tgcgtggaga atgagtgcgt gtgtgatgag 960
44 ggtttcacgg gcgaagactg cagtgcgtc atctgcccc atgactgctt cgaccggggc 1020
45 cgctgcatca atggcacctg ctactgcgaa gaaggcttca cagggaaga ctgcgggaaa 1080
46 cccacctgcc cacatgcctg ccacacccag ggccggtgtg aggaggggca gtgtgtatgt 1140
47 gatgagggtt ttgccggtgt ggactgcagc gagaagaggt gtctgtctga ctgtcacaat 1200
48 cgtggccgct gtgtagacgg gcggtgtgag tgtgatgat gtttactgg agctgactgt 1260
49 ggggagctca agtgtcccaa tggctgcagt ggccatggcc gctgtgtcaa tgggcagtgt 1320
50 gtgtgtgatg agggctatac tggggaggac tgcagccagc tacggtgccc caatgactgt 1380
51 cacagtcggg gccgctgtgt cgaggcaca tgtgtatgt agcaaggctt caaggctat 1440
52 gactgcagtg acatgagctg ccctaatagac tgtcaccagc acggccgctg tgtgaatggc 1500
53 atgtgtgttt gtgatgacgg ctacacaggg gaagactgcc gggatcgcca atgccccagg 1560
54 gactgcagca acaggggcct ctgtgtggac ggacagtgcg tctgtgagga cggcttcacc 1620
55 ggcctgactg gtgcagaact ctctgtcca aatgactgcc atggccaggg tcgctgtgtg 1680
56 aatgggcagt gcgtgtgcca tgaaggattt atgggcaaa actgcaagga gcaaagatgt 1740
57 cccagtgact gtcattggca gggccgctgc gtggacggcc agtgcactct ccacgagggc 1800

```

RAW SEQUENCE LISTING

DATE: 03/19/2001

PATENT APPLICATION: US/09/554,267

TIME: 15:10:48

Input Set : A:\24811669.app

Output Set : N:\CRF3\03192001\I554267.raw

```

58 ttcacaggcc tggactgtgg ccagcactcc tgccccagtg actgcaacaa cttaggacaa 1860
59 tgcgtctcgg gccgctgcat ctgcaacgag ggctacagcg gagaagactg ctcagaggtg 1920
60 tctcctccca aagacctcgt tgtgacagaa gtgacggaag agacggtcaa cctggccttg 1980
61 gacaatgaga tgcgggtcac agagtacctt gtctgtaca cgcaccacca cgagggtggt 2040
62 ctggaaatgc agttccgtgt gcctggggac cagacgtcca ccatcatccg ggagctggag 2100
63 cctgggtgtgg agtactttat ccgtgtattt gccatcctgg agaacaagaa gagcattcct 2160
64 gtcagcgcca ggggtggccac gtacttacct gcacctgaag gcctgaaatt caagtccatc 2220
65 aaggagacat ctgtggaagt ggagtgggat cctctagaca ttgcttttga aacctgggag 2280
66 atcatcttcc ggaatatgaa taaagaagat gagggagaga tcaccaaag cctgaggagg 2340
67 ccagagacct cttaccggca aactggtcta gctcctgggc aagagtatga gatattctctg 2400
68 cacatagtga aaaacaatac ccggggccct ggctgaaga gggtgaccac cacacgcttg 2460
69 gatgccccca gccagatcga ggtgaaagat gtcacagaca ccactgcctt gatcacctgg 2520
70 ttcaagcccc tggtgagat cgatggcatt gagctgacct acggcatcaa agacgtgcca 2580
71 ggagaccgta ccaccatcga tctcacagag cagagaacc agtactccat cgggaacctg 2640
72 aagcctgaca ctgagtacga ggtgtccctc atctcccgca gaggtgacat gtcgaagcaac 2700
73 ccagccaaag agaccttcac aacaggccctc gatgctccca ggaatcttcg acgtgtttcc 2760
74 cagacagata acagcatcac cctggaatgg aggaatggca aggcagctat tgacagttac 2820
75 agaattaagt atgcccccat ctctggaggg gaccacgctg aggttgatgt tccaaagagc 2880
76 caacaagcca caaccaaagc cacactcaca ggtctgaggc cgggaactga atatgggatt 2940
77 ggagtttctg ctgtgaaggga agacaaggag agcaatccag cgaccatcaa cgcagccaca 3000
78 gagttggaca cgcccaagga ccttcagggt tctgaaactg cagagaccag cctgaccctg 3060
79 ctctggaaga caccgttggc caaatttgac cgctaccgcc tcaattacag tctcccaca 3120
80 ggccagtggg tgggagtgcg gcttccaaga aacaccactt cctatgtcct gagaggcctg 3180
81 gaaccaggac aggagtacaa tgtcctcctg acagccgaga aaggcagaca caagagcaag 3240
82 ccgcacagtg tgaaggcatc cactgaacaa gccctgagc tggaaaacct caccgtgact 3300
83 gaggttggtt gggatggcct cagactcaac tggaccgcgg ctgaccaggc ctatgagcac 3360
84 tttatcattc aggtgcagga ggccaacaag gtggaggcag ctoggaacct caccgtgcct 3420
85 ggcagccttc gggctgtgga cataccgggc ctcaaggctg ctacgcctta tacagtctcc 3480
86 atctatgggg tgatccaggg ctatagaaca ccagtgtctt ctgctgaggc ctccacaggg 3540
87 gaaactccca atttgggaga ggtcgtgggt gccgagggtg gctgggatgc cctcaaactc 3600
88 aactggactg ctccagaagg ggcctatgag tactttttca ttcagggtgca ggaggctgac 3660
89 acagtagagg cagcccagaa cctcaccgtc ccaggaggac tgagggtccac agacctgcct 3720
90 gggtccaaag cagccactca ttataccatc accatccgcg gggctactca ggacttcagc 3780
91 acaaccctc tctctgttga agtcttgaca gaggagggtc cagatatggg aaacctcaca 3840
92 gtgaccgagg ttagctggga tgcctcaga ctgaactgga ccacgccaga tggaaacctat 3900
93 gaccagttta ctattcaggt ccaggagggt gaccagggtg aagaggctca caatctcacg 3960
94 gttcctggca gcctgcgttc catggaaatc ccaggcctca gggctggcac tcttacaca 4020
95 gtcaccctgc acggcgaggt cagggggccac agcactcgac cccttgcctg agaggctcgc 4080
96 cagtgggacg tgccgctcca gtccccggtg tctgtgagct gggaaacgaca tctccagcag 4140
97 acagaggatc tcccacagct gggagattta gccgtgtctg aggttgctg ggtggcctc 4200
98 agactcaact ggaccgcagc tgacaatgcc tatgagcact ttgtcattca ggtgcaggag 4260
99 gtcaacaaag tggaggcagc ccagaacctc acgttgctg gcagcctcag ggtgtggac 4320
100 atcccgggcc tggaggctgc cagcccttat agagtctcca tctatggggt gatccggggc 4380
101 tatagaacac cagtactctc tgcctgaggc tccacagcca aagaacctga aattggaaac 4440
102 ttaaattgtt ctgacataac tcccgagagc ttcaatctct cctggatggc taccgatggg 4500
103 atcttcgaga cctttaccat tgaaattatt gattccaata ggttgctgga gactgtggaa 4560
104 tataatatct ctggtgctga acgaactgcc catatctcag ggctaccccc tagtactgat 4620
105 tttattgtct acctctctgg acttgctccc agcatccgga ccaaaacctc cagtgccaca 4680
106 gccacgacag aggcctgccc ccttctggaa aacctaacca tttccgacat taatccctac 4740

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/554,267

DATE: 03/19/2001
TIME: 15:10:48

Input Set : A:\24811669.app

Output Set: N:\CRF3\03192001\I554267.raw

```

107 ggggttcacag tttcctggat ggcacggag aatgcctttg acagctttct agtaacgggtg 4800
108 gtggattctg ggaagctgct ggacccccag gaattcacac tttcaggaac ccagaggaag 4860
109 ctggagctta gaggcctcat aactggcatt ggctatgagg ttatgggtctc tggcttcacc 4920
110 caagggcacac aaaccaagcc cttgagggtc gagattgtta cagaagccga accggaagtt 4980
111 gacaaccttc tggtttcaga tgccacccca gacggtttcc gtctgtcctg gacagctgat 5040
112 gaaggggtct tcgacaattt tgtttcaaaa atcagagata ccaaaaagca gtctgagcca 5100
113 ctggaataaa cctacttgc ccccgaaagt accagggaca taacagggtc cagagaggct 5160
114 actgaatacg aaattgaact ctatggaata agcaaaggaa ggcgatccca gacagtcagt 5220
115 gctatagcaa caacagccat gggctcccca aaggaaagtc ttttctcaga catcactgaa 5280
116 aattcggtc ctgtcagctg gagggcacc acggcccaag tggagagctt ccggattacc 5340
117 tatgtgcca ttacaggagg tacacctcc atggttaact tggacggaac caagactcag 5400
118 accaggctgg tgaactcat acctggcgtg gagtacctg tcagcatcat cgccatgaag 5460
119 ggctttgagg aaagtgaacc tgtctcaggg tcattcacca cagctctgga tggcccatct 5520
120 ggctgtgtga cagccaacat cactgactca gaagccttgg ccagggtgga gccagccatt 5580
121 gccaactgtg acagttatgt catctctac acaggcgaga aagtgccaga aattacacgc 5640
122 acggtgtccg ggaacacagt ggagtatgct ctgaccgacc tcgagcctgc caggaatac 5700
123 aactgagaa tctttgcaga gaaagggccc cagaagagct caaccatcac tgccaagttc 5760
124 acaacagacc tcgattctcc aagagacttg actgtactg aggttcagtc ggaaactgcc 5820
125 ctcttaacct ggcgaccccc ccgggcatca gtcacgggtt acctgctggt ctatgaatca 5880
126 gtggatggca cagtcaagga agtcattgtg ggtccagata ccacctccta cagcctggca 5940
127 gacctgagcc catccaccca ctacacagcc aagatccagg cactcaatgg gccctgagg 6000
128 agcaatatga tccagaccat cttcaccaaa attggactcc tgtacctctt cccaaggac 6060
129 tgctcccaag caatgctgaa tggagacaag acctctggcc tctacacat ttatctgaat 6120
130 ggtgataagg ctccaggcgt ggaagtcttc tgtgacatga cctctgatgg ggggtggatgg 6180
131 attgtgttcc tgagacgcaa aaacggacgc gagaacttct accaaaactg gaaggcatat 6240
132 gctgctggat ttggggaccg cagagaagaa ttctggcttg ggtggacaa cctgaacaaa 6300
133 atcacagccc aggggcagta cgagctccgg gtggacctgc gggaccatgg ggagacagcc 6360
134 tttgtgtct atgacaagtt cagcgtggga gatgccaaga ctgctacaa gctgaagggtg 6420
135 gaggggtaca gtgggacagc aggtgactcc atggcctacc acaatggcag atccttctcc 6480
136 acctttgaca aggacacaga ttcagccatc accaactgtg ctctgtctac aaggggttc 6540
137 tggtagagga actgtcaccg tgtcaacctg atggggagat atggggacaa taaccacagt 6600
138 cagggcgta actggttcca ctggaagggc cacgaacact caatccagtt tgctgagatg 6660
139 aagctgagac caagcaactt cagaaatctt gaaggcagc gcaaacgggc ataaattgga 6720
140 gggaccactg ggtgagagag gaataaggcg gccagagcg aggaaaggat tttaccaaag 6780
141 catcaatata accagcccaa ccacgtggtc acacctgggc atttggtgag aatcaaagct 6840
142 gaccatggat cctggggccc aacggcaaca gcatgggctt cacctctct gtgatttctt 6900
143 tctttgcacc aaagacatca gtctccaaca tgtttctgtt ttgttgtttg attcagcaaa 6960
144 aatctccag tgacaacatc gcaatagttt tttacttctc ttaggtggtc ctgggatggg 7020
145 agaggggtag gatgtacagg ggtagtttgt tttagaacca gccgtatatt acatgaagct 7080
146 gtataattaa ttgtcattat tttgttagc aaagattaaa tgtgtcattg gaagccatcc 7140
147 ctttttttac atttcataca acagaaacca gaaaagcaat actgtttcca ttttaaggat 7200
148 atgattaata ttattaatat aataatgatg atgatgatga tgaaaactaa ggatttttca 7260
149 agagatcttt ctttccaaaa catctctgga cagtacctga ttgtattttt tttttaaata 7320
150 aaagcacaag tacttttgaa aaaaaa 7346
153 <210> SEQ ID NO: 2
154 <211> LENGTH: 17
155 <212> TYPE: DNA
156 <213> ORGANISM: Artificial Sequence
158 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 03/19/2001

PATENT APPLICATION: US/09/554,267

TIME: 15:10:48

Input Set : A:\24811669.app

Output Set: N:\CRF3\03192001\I554267.raw

```

159 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
160     oligonucleotide
162 <400> SEQUENCE: 2
163 ggtggaggtg ggtttgg                                     17
166 <210> SEQ ID NO: 3
167 <211> LENGTH: 17
168 <212> TYPE: DNA
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
173     oligonucleotide
175 <400> SEQUENCE: 3
176 ggcccccatg gtggagg                                     17
179 <210> SEQ ID NO: 4
180 <211> LENGTH: 14
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
186     oligonucleotide
188 <400> SEQUENCE: 4
189 ggcccccatg gtgg                                     14
192 <210> SEQ ID NO: 5
193 <211> LENGTH: 14
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
199     oligonucleotide
201 <400> SEQUENCE: 5
202 ccccatggtg gagg                                     14
205 <210> SEQ ID NO: 6
206 <211> LENGTH: 17
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
212     oligonucleotide
214 <400> SEQUENCE: 6
215 aaggaaagca agaaaga                                     17
218 <210> SEQ ID NO: 7
219 <211> LENGTH: 12
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
225     oligonucleotide
227 <400> SEQUENCE: 7
228 ccatggtgga gg                                     12

```

DATE: 03/19/2001

TIME: 15:10:48

Output Set: N:\CRF3\03192001\I554267.raw

16

15

15

16

15

VERIFICATION SUMMARY

DATE: 03/19/2001

PATENT APPLICATION: US/09/554,267

TIME: 15:10:49

Input Set : A:\24811669.app

Output Set: N:\CRF3\03192001\I554267.raw